COUNCIL ON POST-SECONDARY EDUCATION

Manitoba

Changing Patterns in Enrollment Among Men and Women in Manitoba's Universities

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EXECUTIVE SUMMARY

This study seeks to describe the differing enrollment trends in Manitoba universities for men and women between 1996/97 and 2002/03.

Findings include:

Total Enrollment

- 83.0% of enrollment increases in Manitoba at the graduate and undergraduate level, both full- and part-time, are the result of the growth in female enrollment.

Undergraduate Enrollment

- Full-time undergraduate enrollment of women increased by 19.0% while men's enrollment increased by 2.9%.
- Part-time undergraduate enrollment of women increased by 42.1% while men's enrollment increased by 25.3%.
- While the increase in women's undergraduate enrollment reduced the gender gap in some faculties, many faculties where women were the majority in 1996/97 saw that majority increase in 2002/03.

Graduate Enrollment

- Male full- and part-time graduate enrollment declined (-6.4%) while women's enrollment increased by 7.8%.
- Graduate enrollment increases are almost entirely the result of increases in the enrollment of women studying on a part-time basis.

Important Information about This Study

Data for this analysis are publicly available and are drawn from the 2002/03 and 2003/04 Statistical Compendium. Data are provided by Manitoba universities to the Council on Post-Secondary Education annually. These data are available at www.copse.mb.ca (click the "Documents" tab and then "Statistics" to get links to the Statistical Compendium).

Full-time (FT) enrollment is defined as a count of the numbers of students enrolled in a program taking 60% or more of a full course load. In a typical university undergraduate program, this would mean that a student is taking three to five courses. This definition does not apply to colleges.

Part-time (PT) enrollment is defined as a count of the numbers of students enrolled in a program taking less than 60% of a full course load. In a typical university undergraduate program, this would mean that a student is taking one or two courses. This definition does not apply to colleges.

Total enrollment, or headcount enrollment, is defined as the sum of full-time and part-time enrollment [FT+PT].

Continuing Education at universities can be defined as either for-credit programs, or non-credit programs. This study includes Continuing Education programs that are offered for credit, but does not consider non-credit programs.

Regular Session enrollment is used throughout the paper. Regular Session is the academic session from September to April of each year.

The author is grateful to Ms. Jean Britton, Manitoba Advanced Education and Training, for her comments on an earlier draft. All remaining errors or omissions are the author's.

1.0 INTRODUCTION

Enrollment in Manitoba's universities over the last decade has changed considerably. From a period of decline throughout much of the 1990s, enrollment began to increase in 1999/00. The purpose of this study is to describe enrollment changes among men and women at Manitoba universities from 1996/97, when enrollment was still in a period of decline, to 2002/03, when enrollment had been increasing for five years.

Findings suggest that, similar to trends in Canada and the United States,[1] enrollment rates for women in Manitoba have been higher than those for men. The proportion of women in full- and part-time graduate and undergraduate studies at universities in Manitoba has increased from about one-third in 1973[2], to 52% in 1984/85[3] to nearly 60% in 2002/03.

University enrollment rates are interesting when compared to the proportion of males and females in Manitoba's population, as well as the proportion in the high school system.

When considering the number of traditional university-aged Manitobans in the population, there were slightly more men than women.

Proportion of Men and Women in the Manitoba Population, 2003

Age	Women	Men
18-21	48.7%	51.3%
22-24	48.9%	51.1%
All Ages	50.4%	49.6%

Source: Statistics Canada

However, in the high school population in 2002/03 there were more girls than boys.

Proportion of Boys and Girls in the Manitoba High School System, 2002/03

	Girls	Boys
2002/03	53.2%	46.8%

Source: Manitoba Advanced Education and Training

One would expect that the population of universities would approximate the population as a whole, traditionally university-aged adults or the high school population. However, findings in this report suggest that this is not the case.

Given this, and the fact that research has demonstrated that important personal and societal benefits accrue from a university education,[4] the slower increase in male enrollment at Manitoba universities warrants further investigation.[5]

1.1 Methodology

Drawing from public enrollment data, analysis is presented regarding the percentage change in enrollment, and in particular how that change has been different for men and women.

Enrollment data prior to 1996/97 broken down by gender are comparable for total regular session enrollment only (see Appendix 1).

The present study's main focus is the enrollment change between 1996/97 and 2002/03. These years coincide with an increased pace in the divergence between male and female enrollment in universities in Manitoba (see Appendix 1). Enrollment differences for men and women in Manitoba are similar to those of Canada (see Appendix 2), suggesting that these trends are not just present in Manitoba.

This study is limited to an analysis of enrollment at the University of Manitoba (U of M), University of Winnipeg (U of W), Brandon University (BU) and Collège de Saint-Boniface (CSB). Trend data from community colleges is not yet available and thus is not considered. Further, this study does not attempt to link the enrollment differences of men and women to larger issues related to gender in society, but focuses on how university enrollment has changed for men and women in Manitoba.

1.2 Outline

This study looks at undergraduate and graduate enrollment, examining full-time and part-time enrollment trends separately. Findings are discussed and conclusions are presented.

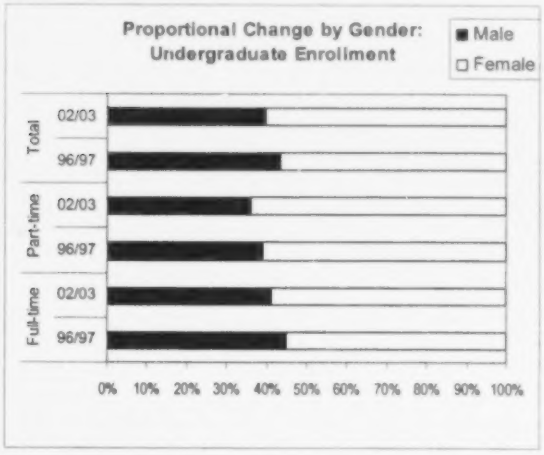
2.0 UNDERGRADUATE ENROLLMENT

2.1 Total Undergraduate Enrollment

Total undergraduate enrollment in Manitoba increased by 17.4% between 1996/97 and 2002/03. However, this increase has not been the same for men and women, and has been different for full-and part-time studies. The enrollment gap between men and women

increased for both full- and part-time undergraduate studies.

Even though the total number of men and women has increased at the four Manitoba universities, the proportion of women enrolled has increased relative to that of men. In 1996/97, there were more women than men enrolled in full-and part-time programs, and by 2002/03 this gap had widened. The proportion of women in full- and part-time university undergraduate programs increased from 56.6% in 1996/97 to 60.2% in 2002/03.



In faculties where women have traditionally outnumbered men, the gender gap has widened. For example, in Nursing, women accounted for 88.5% of total enrollment in 1996/97, growing to 90.0% in 2002/03. Similar trends were observed in the School of Art, Faculties of Architecture, Arts, Education, Human Ecology, Medical Rehabilitation, Nursing, Pharmacy, Social Work and the School of Music.

In faculties where men have traditionally outnumbered women, progress has been made in terms of increasing the proportion of women, with the exception of the Agricultural Diploma Program and the Faculty of Engineering, where the proportion of men increased over seven years (see Appendix 5).

At the U of M, of the 24 faculties/programs (see Appendix 5), twelve have had the proportion of women enrolled increase relative to men. Eight (8) faculty/programs have seen the proportion of men and women move towards greater balance; one (B.Sc. Dentistry 50.0% women, 50.0% men) has achieved a balance. The Faculty of Science is the sole faculty at the U of M that has retained its relative proportions, with 43.4% women and 56.6% men in 1996/97, moving to 43.6% women and 56.4% men in 2002/03.

Seven of the nine faculties/programs with a majority of men in 1996/97 saw the proportion of female enrollment increase. Only in the Agriculture Diploma Program and Engineering did the proportion of males increase, from 81.3% and 79.8% in 1996/97 to 89.9% and 83.3% in 2002/03 respectively. These increases were reflected in both full- and part-time enrollments for both areas.

During the seven years under examination, just two faculties at the U of M saw a switch in the dominant gender. In the degree program in Agricultural and Food Sciences, the proportion of women enrolled fell from 51.4% in 1996/97 to 48.2% in 2002/03. In the Faculty of Law, the proportion of women enrolled increased from 46.6% in 1996/97 to 53.8% in 2002/03.

At the U of W, the proportion of women relative to men increased in all faculties. Only in part-time Education programs did the proportion of women decline (from 72.4% in 1996/97 to 60.6% in 2002/03). At BU and CSB, the proportion of women increased or stayed nearly the same in all faculties.

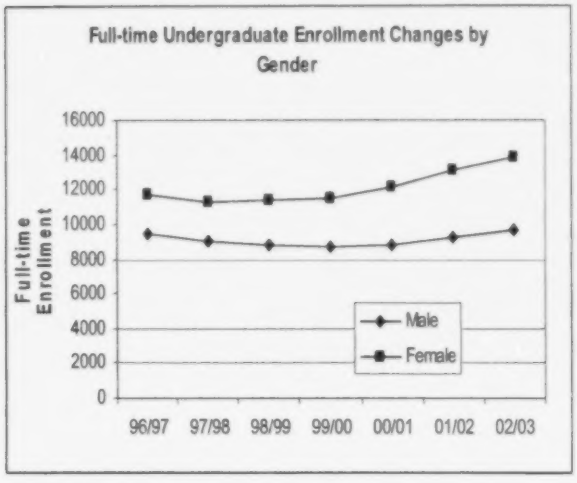
2.2 Full-time Undergraduate Enrollment

Overall, enrollment increases at Manitoba universities have been the result of more women enrolling than men. While the enrollment of men continues to increase at the undergraduate level, that increase is less than half the rate of women (see Appendices 3 and 4).

Full-time undergraduate enrollment increased by 11.8%. Broken down, male enrollment increased by 2.9% and female by 19.0%. In most faculties at the four universities, declines in men's enrollment occurred.

At the U of M, men's full-time enrollment increased in four faculties: Continuing Education (62.1%), University 1 (47.8%), Nursing (30.8%) and Management (8.9%). In all other faculties and schools at the U of M, men's full-time enrollment was flat, or declined (-2.7% in Medicine to -55.3% in Education).

The rate of women's full-time enrollment declined from between -7.5% to -72.0% in eight faculties at the U of M (Agriculture, Arts, Dental Hygiene, Education, Engineering, Human Ecology, Physical Education & Recreational Studies, and Science). Women's enrollment increased from between 2.0% to 100.0% in all other faculties and schools.



At the U of W, men's full-time enrollment fell in Arts programs (-54.6%) and in Science programs (-65.6%), about the same rate as the decline for women's enrollment in these faculties. Notable increases were seen for men (78.9%) and women (125.2%) in Education, (possibly a result of the addition of a fifth year to the education program, meaning students were enrolled for longer periods of time). While part-time enrollment declines in these faculties were also experienced for both genders, they were not as severe as in full-time enrollment.

At BU, male full-time enrollment declined in Arts (-3.1%), Science (-46.5%), Education (-21.1%) and Music (-28.9%). Female full-time enrollment fell in Education (-9.0%), Science (-18.4%) and Music (-6.3%), but grew in Arts (6.7%). Large increases were seen for both men and women in General Studies, Health Studies and the First Nations Aboriginal Counseling program.

At CSB, men's full-time enrollment in Arts declined by more than half (-51.1%), in Science (-59.4%), and in Continuing Education (-60.0). Women's full-time enrollment decreased in Science (-50.0%), Education (-22.1%) and Continuing Education (-50.0%).

2.3 Part-time Undergraduate Enrollment

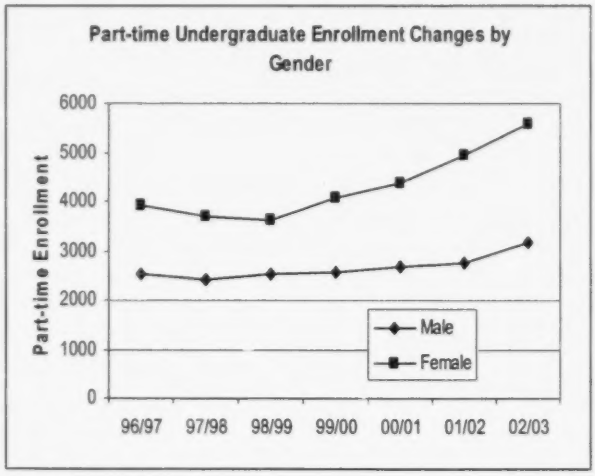
Overall, part-time undergraduate enrollment increased by a total of 35.5%. Broken down by gender, men's enrollment increased by 25.3%, and women's enrollment increased by 42.1%.

Part-time enrollment changes at the U of M generally occurred in the same facilities for both men and women. Exceptions included Music and Physical Education & Recreation Studies where female enrollment declined by -41.7% and -52.2% and that of men grew by 40.0% and 8.7% respectively.

Part-time increases at the U of W were seen for both men (237.5%) and women (97.6%) in Education (possible effect of the addition of a fifth year to the program).

While decreases occurred in part-time enrollment for men in Arts (-3.1%) and Education (-21.1%) at BU, increases were seen in the other faculties. The part-time enrollment of women at BU fell in Education (-9.0%).

Men's part-time enrollment at CSB fell (-2.9%) while women's enrollment increased by 59.1%. In contrast, women's part-time enrollment fell in Science (-11.1%) and Education (-3.3%), while men's part-time enrollment was stable for Science (0.0%) and increased by 41.7% for Education.



Part-time Enrollment Rates Higher than Full-time for Men and Women

Overall, undergraduate part-time enrollments increased by 35.5%, compared to 11.8% for full-time enrollment.

At the undergraduate level, percentage increases in part-time enrollment were much higher than for full-time enrollment for both men and women. The percentage growth in part-time enrollment among men was 25.3%, as compared to full-time enrollment growth of 2.9%. The growth in part-time enrollment for women was 42.1%, compared to full-time growth of 19.0%.

Undergraduate Enrollment Change 1996/97 – 2002/03

Status	Female	Male	Total
Full-time	19.0%	2.9%	11.8%
Part-Time	42.1%	25.3%	35.5%
Total	**24.8%**	**7.6%**	**17.4%**

Despite the slower rate of enrollment for men overall, men entering undergraduate studies were more likely to choose part-time than full-time study when compared to similar enrollment decisions of women. This trend could be observed in all four Manitoba universities.

While at the U of M, U of W and BU the overall part-time enrollment rate of women increased faster than that of men, men's part-time enrollment (71.0%) increased faster than female part-time enrollment (62.4%) at CSB.

3.0 GRADUATE ENROLLMENT

Total graduate enrollment increased by 1.3% overall in Manitoba's university system.

Graduate Enrollment Change All Universities 1996/97 – 2002/03

	UM	U W	BU	CSB	Total
96/97	2891	29	67	37	3024
02/03	2852	32	85	83	3052
Change	**-1.3%**	**10.3%**	**49.1%**	**124.3%**	**1.3%**

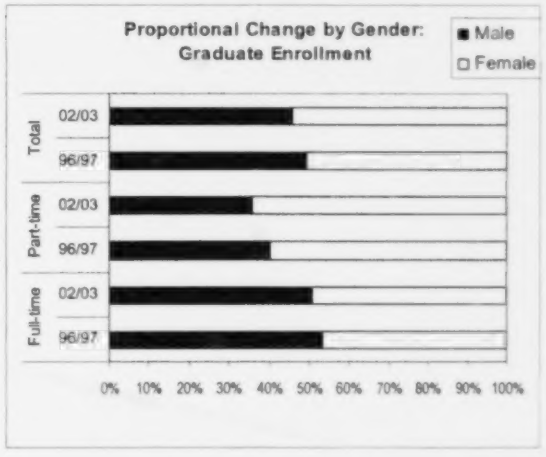
However, data from U of W graduate programs are not available by gender for any year except 2002/03, when 19 graduate students, or 59.4% were women and 13, or 40.6% were men. Because the data are incomplete, the following analysis does not consider graduate students from the U of W.

3.1 Total Graduate Enrollment at BU, CSB and the U of M

Total graduate enrollment at the U of M, BU and CSB increased by 0.8%, from 2,995 to 3,020 or 25 students. This increase can be attributed to increases in women's enrollment in graduate programs, as full- and part-time male graduate enrollment decreased during this period (-6.4%). Female enrollment in full- and part-time graduate studies grew by 7.8%. Total male and female enrollment fell to its lowest point in 2000/01, and began to recover in 2001/02.

The chart below shows the proportion of men and women enrolled in graduate studies in 1996/97 and 2002/03. In 1996/97 there were more women enrolled in graduate programs, and the gap had widened by 2002/03.

The proportion of women in graduate programs increased from 50.9% in 1996/97 to 54.4% in 2002/03, while both the proportion and the absolute numbers of men enrolled in graduate studies declined (see Appendix 7).



At the U of M, three graduate faculties/schools experienced a reversal in the dominant gender. The proportion of women in graduate Architecture programs increased from 41.7% in 1996/97 to 50.6%in 2002/03. Similarly, the proportion of women in graduate Pharmacy programs increased from 33.3% in 1996/97 to 58.5% in 2002/03. In graduate Law programs,

the proportion of women fell from 60.0% to 37.5% in the same years.

Proportionately more men were enrolled in Agriculture, Dentistry, Engineering, Management and Science in 2002/03, unchanged since 1996/97, but the proportion of men on a full-time and part-time basis had declined relative to that of women in Engineering and Science. The proportion of men enrolled full-time in Agriculture and Food Sciences declined, but part-time enrollment increased. The proportion of men in Dentistry increased (no students were enrolled part-time in 1996/97), and the proportion of men enrolled in Management on a full-and part-time basis has increased since 1996/97.

The proportion of women in graduate programs in Arts, Human Ecology and Medicine increased on a full- and part-time basis in 2002/03 as compared to 1996/97. While the proportion of women enrolled full-time increased for Medical Rehabilitation and Nursing in 2002/03, the proportion of women enrolled part-time in these programs decreased. Interestingly, 100.0% of full-time graduate nursing students in 2002/03 were women.

In Graduate Studies and the Natural Resource Institute, the proportion of women enrolled remained higher than that of men in 2002/03, but had declined when compared to 1996/97.

In 2002/03, the proportion of women enrolled in Physical Education and Recreational Studies remained higher than that of men, but the proportion of women enrolled on a full-time basis had declined when compared to 1996/97. The proportion of women enrolled on a part-time basis in these faculties increased.

In the Faculty of Education, the proportion of women in 2002/03 increased relative to men because of growth in part-time enrollment.

Both BU and CSB experienced proportional increases in women in part-time graduate programs offered in 1996/97 and 2002/03. All graduate students at BU and CSB are defined by the institution as being part-time, and thus there were no full-time graduate students of either gender enrolled in these two universities.

3.2 Full-time Graduate Enrollment at BU, CSB and the U of M

Full-time graduate enrollment of men decreased in the seven years under study, while women's enrollment increased. While men continue to outnumber women in full-time graduate studies, this gap reached a turning point in 2000/01, and was nearly closed by 2002/03.

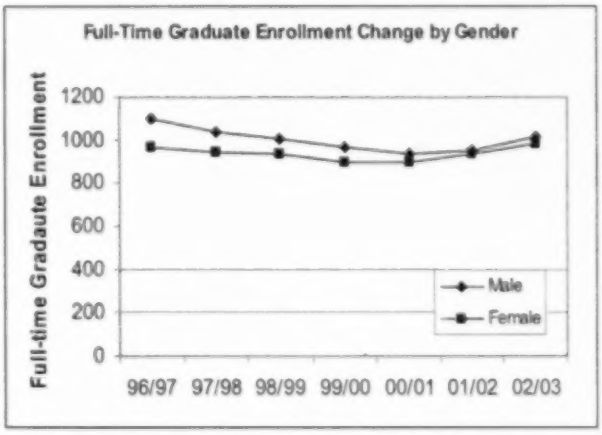
In terms of full-time enrollment changes by faculty (see Appendix 6), faculties have seen some gains by women in fields traditionally dominated by men. In graduate Engineering, women's enrollment increased by 27.7% as compared to 6.5% for men. This increase marginally changed the proportion of women to men in graduate Engineering.

Proportion of Women and Men in Full-time Graduate Engineering Programs

Year	Female	Male
1996/97	18.0%	82.0%
2002/03	20.8%	79.2%

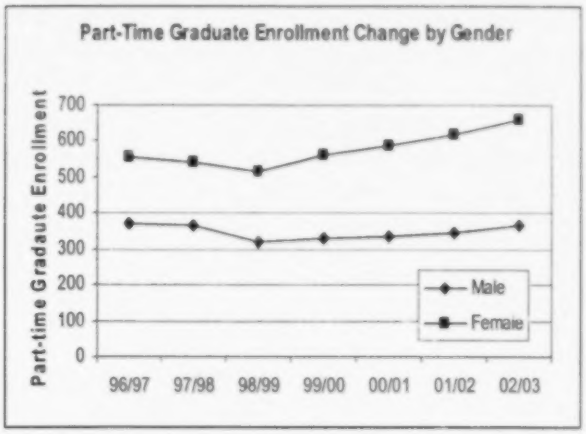
Male enrollment growth rates increased in other professional graduate programs, including Law (150.0%), Education (9.1%), Management (10.7%) and Physical Education & Recreation Studies (44.4%). Female enrollment in these faculties declined in the same period.

Female enrollment rates grew in Agriculture (6.5%), Architecture (40.4%), Pharmacy (166.7%) and Science (2.2%), while male enrollment in these faculties declined.



3.3 Part-time Graduate Enrollment at BU, CSB and the U of M

Overall, part-time graduate studies followed similar trends as did part-time undergraduate studies; the part-time graduate enrollment rate was higher than the full-time rate for both men and women.



The growth in part-time enrollment for women was 19.0%, compared to full-time growth of 1.4%. The percentage growth in part-time enrollment for men was negative, at -1.6%, as was the full-time rate of -8.0%.

Part-time enrollment of women increased in graduate Education programs at BU, CSB and the U of M, while part-time male enrollment increased at CSB. Some faculties that saw female full-time graduate enrollment decreases saw female part-time enrollment increase. Women's part-time enrollment at the U of M increased in Education (3.1%), Management (22.9%) and Physical Education and Recreation Studies (400.0%), but decreased for full-time studies in each of these faculties.

Women's enrollment in graduate Engineering increased by 55.6%, while male enrollment declined (-2.3%). This had a more pronounced effect on the proportions of men and women in part-time graduate Engineering programs than with full-time graduate Engineering programs.

Proportion of Women and Men in Part-time Graduate Engineering Programs

Year	Female	Male
1996/97	17.0%	83.0%
2002/03	24.6%	75.4%

Part-time Graduate Enrollment Growth Rates Higher than Full-time

Overall, part-time enrollment growth rates in graduate studies were higher (10.7%) than were full-time growth rates (-3.6%). Increases applied to both men and women.

> The increasing part-time enrollment of women accounts for nearly the entire enrollment increase in graduate studies.

Despite the fact that the overall numbers of women are increasing at the graduate level, the increase in absolute terms for women in full-time studies has been 14 students, compared to 105 part-time women enrollees. The increasing part-time enrollment of women accounts for nearly the entire enrollment increase in graduate studies.

Graduate Enrollment Change 1996/97 – 2002/03

Status	Female	Male	Total
Full-time	1.4%	-8.0%	-3.6%
Part-Time	19.0%	-1.6%	10.7%
Total	**7.8%**	**-6.4%**	**0.8%**

4.0 DISCUSSION & CONCLUSION

The present study has contributed to understanding the post-secondary environment in Manitoba through identifying graduate and undergraduate enrollment trends as they differ for men and women at full- and part-time levels.

While university enrollment has reached historic levels in recent years, when looking at graduate and undergraduate enrollment together, fully 83.0% of enrollment increases at Manitoba universities were the result of an increased number of women choosing university studies.

Total Enrollment Increase 1996/97 – 2002/03

Gender	#	%
Male	819	17.0%
Female	3,989	83.0%
Total	**4,808**	**100.0%**

Between 1996/97 and 2002/03, more men and women enrolled in undergraduate studies at Manitoba universities. Additionally, the rate of increase was much higher for women than for men in both full- and part-time studies. Men were more likely to choose part-time studies than were women.

While the gap closed in most areas traditionally dominated by men, women continued to be drawn to faculties that have traditionally had high female enrollment.

Despite the overall percentage increases in female enrollment in universities in Manitoba, there were only some changes in the proportions of men and women in most faculties. While the gap closed in most areas traditionally dominated by men, women continued to be drawn to faculties that have traditionally had high female enrollment.

It is important to note that, at the undergraduate level, the enrollment growth rate was positive for both men and women, although the growth rate for male enrollment was slower than that for women. While the numbers of women at the graduate level increased, the numbers of men decreased in full- and part-time studies. There was a clear trend away from graduate education for men.

The faster rate of female enrollment over the past seven years has helped to begin increasing, albeit slowly, the proportion of women in historically male dominated facilities, with the exception of the Agriculture Diploma program and Engineering. Similarly, the proportion of men in historically female dominated faculties at the graduate level has started to increase in areas such as Law, Medical Rehabilitation, and Social Work, but has decreased in Nursing.

Much of the increase in women's enrollment has been in areas where women have traditionally been overrepresented, such as in Nursing and Education. This plus the slow progress of women in traditionally male dominated disciplines suggests that complex issues may be at play. Further research is required to determine reasons why trends are unfolding as they are.

Additional analysis of students' post-secondary experiences as well as their experiences in high school may be fruitful. Some outstanding research questions include:

- How is enrollment of men and women changing at community colleges and in apprenticeship programs? What impact do these changes have on university enrollment?
- Why do the increases in enrollment for women favour academic disciplines where women have been traditionally over represented?
- How do the secondary education experiences of boys and girls influence post-secondary enrollment decisions?
- What are the trends for First Nations and Aboriginal students?
- What are the long-term social and economic implications of enrollment imbalances among the genders at universities?

Useful data for examining these and other questions are available from Statistics Canada, including the National Graduates Survey (NGS), Youth in Transition Survey (YITS), and the Program for International Student Assessment (PISA), among others.

Additional analysis using these and other data sources could help to provide answers to the questions raised by gender enrollment trends at universities observed in Manitoba and throughout Canada.

Notes

1. Statistics Canada, "University Enrollment, 2001/02," *The Daily* (July 30, 2004), 5-9, *passim*; Brian A. Jacob, *Where the Boys Aren't: Non-Cognitive Skills, Returns to School and the Gender Gap in Higher Education*, Working Paper 8964 (Cambridge MA: National Bureau of Economic Research, 2002), 3.

2. Manitoba. *Post-Secondary Education in Manitoba: Report of the Task Force on Post-Secondary Education in Manitoba* (Winnipeg: Task Force on Post-Secondary Education, 1973), 27. Exact figures are not available.

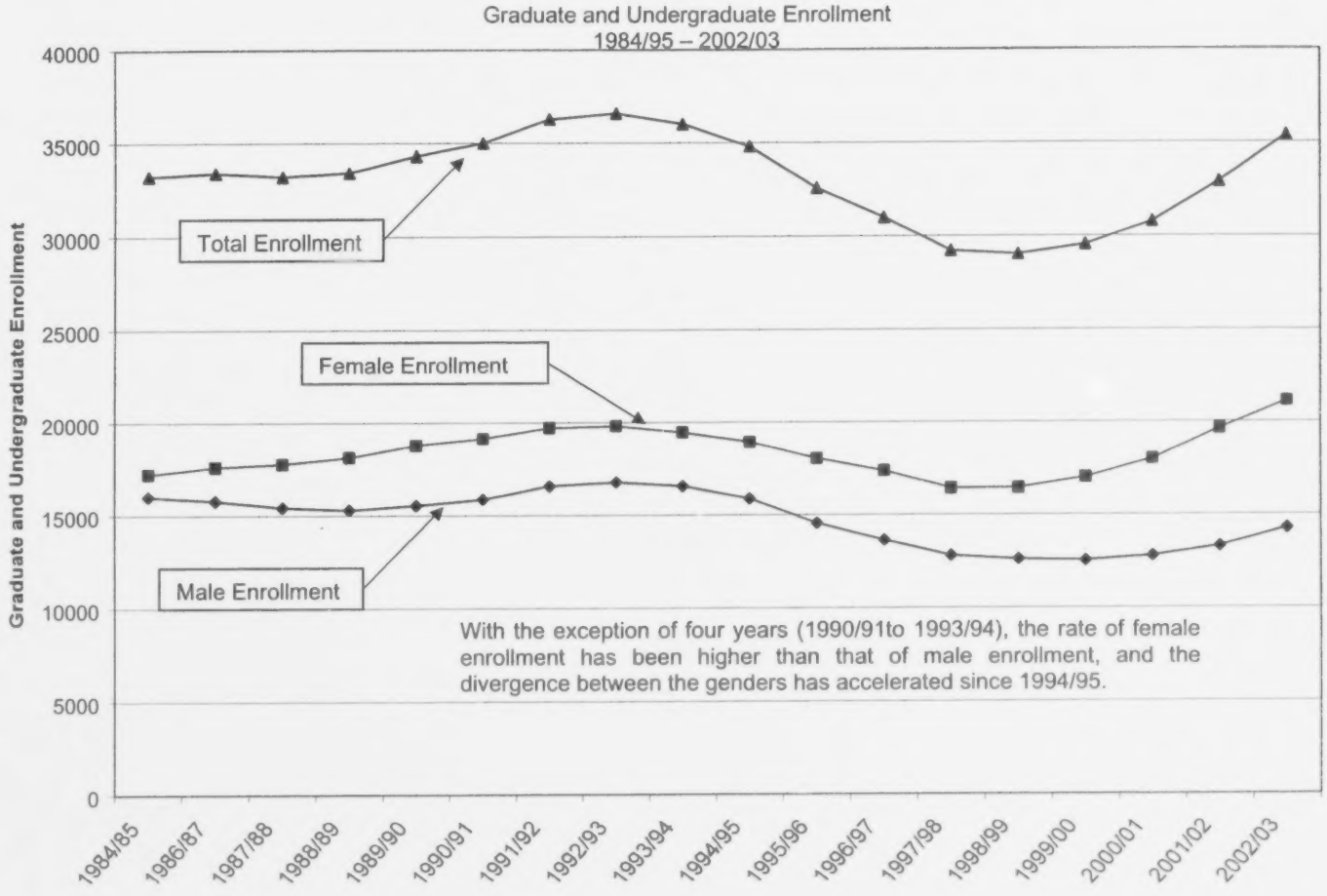
3. Universities Grants Commission, *Annual Report 1985-86* (Winnipeg: UGC, 1986), Appendix C, Table IV, calculations by author.

4. Daniel Boothby and Geoff Rowe, *Rate of Return to Education: A Distributional Analysis Using the LifePaths Model* (Ottawa: Human Resource Development Canada, 2002), *passim*; Ross Finnie, "Holding Their Own: Employment and Earnings of Post-Secondary Graduates," *Education Quarterly Review* 7 no. 1 (2000), 21-37, *passim;* Allison Bone, "Pursuing a Master's Degree: Opportunity Cost and Benefits," *Education Quarterly Review* 8 no. 4 (2000) , 16-27, *passim*; _____, *Reaping the Benefits: Defining the Public and Private Value of Going to College* (Washington DC: Institute for Higher Education Policy, 1988), *passim*.

5. Jacob, *Where the Boys Aren't*, 3; David Laidler, "An Introductory Essay," in David Laidler, ed. *Renovating the Ivory Tower: Canadian Universities and the Knowledge Economy* (Toronto: CD Howe Institute, 2002), 17.

Appendix 1

Total Enrollment by Gender (Regular Session)



Appendix 2: Manitoba Compared to National Figures

The split between men and women at all levels of university is roughly the same in Canada and Manitoba.* Note that the latest national data available from Statistics Canada is 2001/02.

Canada 2001/02			Manitoba 2001/02		
	Number ('000s)	Percent		Number ('000s)	Percent
Undergraduate Enrollment			**Undergraduate Enrollment**		
Male	286.5	41.5%	Male	12.0	39.7%
Female	403.2	58.5%	Female	18.1	60.3%
Total	689.7	100.0%	Total	30.0	100.0%
Graduate Enrollment			**Graduate Enrollment**		
Male	62.0	48.9%	Male	1.3	44.8%
Female	64.9	51.1%	Female	1.6	55.2%
Total	126.9	100.0%	Total	2.9	100.0%
Graduate and Undergraduate Enrollment			**Graduate and Undergraduate Enrollment**		
Male	376.8	42.3%	Male	13.3	40.4%
Female	509.8	57.7%	Female	19.7	59.9%
Total	886.8	100.0%	Total	32.9	100.0%

Source: COPSE Statistical Compendium; Statistics Canada, "University Enrolment," *The Daily* (July 30, 2004), 7, author's calculations.

* Enrollment may not add due to the exclusion of the unknown sex category in national figures, or because of rounding.

Appendix 3: Percentage Change in Enrollment 1996/97 to 2002/03

Percent Change in Undergraduate Enrollment by Gender, 1996/97 to 2002/03

	UM		UW		BU		CSB		Total	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
FT	16.5%	5.4%	26.6%	-3.4%	13.4%	-6.1%	38.7%	16.2%	19.0%	2.9%
PT	44.6%	27.7%	34.0%	23.4%	44.2%	9.7%	62.4%	71.0%	42.1%	25.3%
Total	**22.7%**	**9.3%**	**28.8%**	**4.2%**	**23.1%**	**-1.4%**	**47.1%**	**36.5%**	**24.8%**	**7.6%**

Source: Statistical Compendium, 2002/03; 2003/04

Percent Change in Graduate Enrollment by Gender, 1996/97 to 2002/03

	UM		UW[1]		BU		CSB		Total[2]	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
FT	2.1%	-7.9%	--	--	-100.0%	-100.0%	-100.0%	0.0%	1.4%	-8.0%
PT	7.1%	-2.5%	--	--	87.9%	-17.9%	266.7%	33.3%	19.0%	-1.6%
Total	**3.8%**	**-6.7%**	**--**	**--**	**63.2%**	**-20.7%**	**243.8%**	**33.3%**	**7.8%**	**-6.4%**

Source: Statistical Compendium, 2002/03; 2003/04

Notes

1. University of Winnipeg was unable to provide data broken down by gender. Total graduate enrollment in 1996/97 was 29 full- and part-time students, and total graduate enrollment was 85 full- and part-time students.
2. Total does not include the University of Winnipeg

Appendix 4: Undergraduate Enrollment Percentage Change by Faculty

University of Manitoba: Enrollment Change 1996/97 - 2002/03

Undergraduate Enrollment	Full-time		Part-time	
	Fem	Male	Fem	Male
Agricultural & Food Sciences				
Degree	-55.2%	-47.7%	-27.6%	-31.0%
Diploma	-72.0%	-35.6%	-33.3%	-27.8%
Architecture	6.0%	-23.4%	0.0%	250.0%
Art, School of	22.2%	-2.8%	7.8%	10.0%
Arts	-21.7%	-29.3%	-21.6%	-27.5%
Continuing Education	103.0%	62.1%	149.6%	75.3%
Dentistry				
Dentistry	25.7%	-3.1%	--	--
B.Sc. (Dentistry)	100.0%	-33.3%	--	--
Dental Hygiene	-7.5%	0.0%	--	--
Education	-62.6%	-55.3%	-2.8%	-34.6%
Engineering	-39.8%	-25.8%	-33.3%	-3.9%
Human Ecology	-37.6%	-69.0%	-57.8%	-42.9%
Law	14.1%	-11.6%	200.0%	0.0%
Management	28.7%	8.9%	50.0%	6.3%
Medicine				
Medicine	54.5%	-2.7%	--	--
B.Sc. (Medicine)	50.0%	-26.1%	--	--
Medical Rehabilitation	23.1%	-32.0%	-80.0%	0.0%
Music	23.8%	-14.3%	-41.7%	40.0%
Nursing	79.8%	30.8%	82.5%	120.0%
Pharmacy	20.9%	-36.8%	100.0%	-100.0%
Phys Ed & Rec Studies	-15.8%	-5.0%	-52.2%	8.7%
Science	-29.2%	-29.8%	15.1%	9.7%
Social Work	2.0%	-20.4%	28.6%	50.0%
University I[1]	57.7%	47.8%	279.3%	287.0%
Total, U of Manitoba	**16.5%**	**5.4%**	**44.6%**	**27.7%**

1. University 1 was established beginning in 1998/99. The percentage change shown is from 1998/99 to 2002/03. Faculties/schools that had previously accepted "new" students showed an enrollment drop for 1998.

University of Winnipeg: Change 96/97 - 02/03

Undergraduate Enrollment	Full-time		Part-time	
	Fem	Male	Fem	Male
Arts	-51.7%	-54.6%	-22.9%	-30.5%
Education	125.2%	78.9%	97.6%	237.5%
Science	-62.0%	-65.6%	-3.5%	-28.6%
Other [1]	586.4%	466.7%	202.4%	203.3%
Total, U of Winnipeg	**26.6%**	**-3.4%**	**34.0%**	**23.4%**

1. Includes those students not declaring a major

Brandon University: Change 96/97 - 02/03

Undergraduate Enrollment	Full-time		Part-time	
	Fem	Male	Fem	Male
Arts	6.7%	-3.1%	22.1%	-20.2%
Education	-9.0%	-21.1%	-26.5%	-23.1%
Science	-18.4%	-46.5%	13.6%	19.4%
Music	-6.3%	-28.9%	233.3%	100.0%
General Studies	174.3%	98.6%	186.7%	104.8%
Health Studies	72.2%	142.9%	185.7%	600.0%
FN Aboriginal Counseling	475.0%	1000.0%	0.0%	0.0%
Non-faculty [1]	--	--	-100.0%	0.0%
Total, Brandon U	**13.4%**	**-6.1%**	**44.2%**	**9.7%**

1. Non faculty students have not registered in a faculty as of November 1st in that year.

CSB: Change 96/97 - 02/03

Undergraduate Enrollment	Full-time		Part-time	
	Fem	Male	Fem	Male
Arts	7.0%	-51.1%	59.1%	-2.9%
Business Administration[1]	140.0%	28.6%	--	100.0%
Science	-50.0%	-59.4%	-11.1%	0.0%
Education	-22.1%	0.0%	-3.3%	41.7%
University 1[2]	112.3%	64.5%	130.0%	600.0%
Continuing Education[3]	-50.0%	-60.0%	260.0%	350.0%
U of M Students[4]	100.0%	--	57.1%	150.0%
Total, CSB	**38.7%**	**16.2%**	**62.4%**	**71.0%**

1. Business Administration first accepted students in 1999/00. Percentage change shown is from 1999/00 to 2002/03.
2. University 1 was established beginning in 1998/99. The percentage change shown is from 1998/99 to 2002/03.Faculties/schools that had previously accepted "new" students will show an enrollment drop for 1998.
3. These students are taking university courses but are not seeking a credential.
4. These are UM students taking courses at CSB.

Appendix 5: Proportion of Women to Men by Institution and Faculty in Undergraduate Programs

U of Manitoba Undergraduate Programs	1996/97 Proportions						2002/03 Proportions					
	Full-time		Part-time		Total		Full-time		Part-time		Total	
	Fem	Male	Fem	Male	Fem	Male	Fem	Male	Fem	Male	Fem	Male
Agricultural & Food Sciences												
Degree	51.5%	48.5%	50.0%	50.0%	51.4%	48.6%	47.7%	52.3%	51.2%	48.8%	48.2%	51.8%
Diploma	19.4%	80.6%	14.3%	85.7%	18.7%	81.3%	9.5%	90.5%	13.3%	86.7%	10.1%	89.9%
Architecture	56.8%	43.2%	75.0%	25.0%	57.2%	42.8%	64.5%	35.5%	46.2%	53.8%	63.7%	36.3%
Art, School of	57.1%	42.9%	68.1%	31.9%	60.1%	39.9%	62.6%	37.4%	67.6%	32.4%	64.0%	36.0%
Arts	57.7%	42.3%	57.2%	42.8%	57.6%	42.4%	60.2%	39.8%	59.1%	40.9%	59.9%	40.1%
Continuing Education	43.3%	56.7%	61.0%	39.0%	53.7%	46.3%	48.8%	51.2%	69.0%	31.0%	61.7%	38.3%
Dentistry												
Dentistry	35.4%	64.6%			35.4%	64.6%	41.5%	58.5%			41.5%	58.5%
B.Sc. (Dentistry)	25.0%	75.0%			25.0%	75.0%	50.0%	50.0%			50.0%	50.0%
Dental Hygiene	100.0%	0.0%			100.0%	0.0%	94.2%	5.8%			94.2%	5.8%
Education	72.3%	27.7%	75.8%	24.2%	73.1%	26.9%	68.5%	31.5%	82.3%	17.7%	74.2%	25.8%
Engineering	20.8%	79.2%	15.7%	84.3%	20.2%	79.8%	17.5%	82.5%	11.4%	88.6%	16.7%	83.3%
Human Ecology	91.0%	9.0%	92.2%	7.8%	91.2%	8.8%	95.3%	4.7%	89.7%	10.3%	94.6%	5.4%
Law	46.7%	53.3%	42.9%	57.1%	46.6%	53.4%	53.1%	46.9%	69.2%	30.8%	53.8%	46.2%
Management	40.9%	59.1%	41.3%	58.7%	41.0%	59.0%	45.0%	55.0%	49.8%	50.2%	45.8%	54.2%
Medicine												
Medicine	34.9%	65.1%			34.9%	65.1%	46.0%	54.0%			46.0%	54.0%
B.Sc. (Medicine)	25.8%	74.2%			25.8%	74.2%	41.4%	58.6%			41.4%	58.6%
Medical Rehabilitation	72.2%	27.8%	100.0%	0.0%	73.0%	27.0%	82.5%	17.5%	100.0%	0.0%	82.6%	17.4%
Music	60.0%	40.0%	70.6%	29.4%	61.1%	38.9%	68.4%	31.6%	50.0%	50.0%	66.9%	33.1%
Nursing	86.1%	13.9%	92.1%	7.9%	88.5%	11.5%	89.5%	10.5%	90.6%	9.4%	90.0%	10.0%
Pharmacy	55.8%	44.2%	50.0%	50.0%	55.7%	44.3%	70.7%	29.3%	100.0%	0.0%	71.4%	28.6%
Phys Ed & Rec Studies	60.6%	39.4%	66.7%	33.3%	61.6%	38.4%	57.6%	42.4%	46.8%	53.2%	56.2%	43.8%
Science	44.0%	56.0%	40.0%	60.0%	43.4%	56.6%	44.2%	55.8%	41.1%	58.9%	43.6%	56.4%
Social Work	82.5%	17.5%	81.7%	18.3%	82.3%	17.7%	85.8%	14.2%	79.2%	20.8%	83.5%	16.5%
University 1[1]							55.8%	44.2%	54.2%	45.8%	55.5%	44.5%
Total, U of Manitoba	**53.1%**	**46.9%**	**60.0%**	**40.0%**	**54.4%**	**45.6%**	**55.5%**	**44.5%**	**62.9%**	**37.1%**	**57.3%**	**42.7%**

1. University 1 was established beginning in 1998/99. The percentage change shown is from 1998/99 to 2002/03. Faculties/schools that had previously accepted "new"

U of Winnipeg Undergraduate Programs	1996/97 Proportions						2002/03 Proportions					
	Full-time		Part-time		Total		Full-time		Part-time		Total	
	Fem	Male	Fem	Male	Fem	Male	Fem	Male	Fem	Male	Fem	Male
Arts	58.6%	41.4%	61.9%	38.1%	59.6%	40.4%	60.1%	39.9%	64.3%	35.7%	61.8%	38.2%
Education	76.1%	23.9%	72.4%	27.6%	75.6%	24.4%	80.0%	20.0%	60.6%	39.4%	77.2%	22.8%
Science	51.6%	48.4%	46.4%	53.6%	50.6%	49.4%	54.1%	45.9%	53.9%	46.1%	54.0%	46.0%
Other [1]	59.6%	40.4%	62.5%	37.5%	61.0%	39.0%	64.1%	35.9%	62.4%	37.6%	63.6%	36.4%
Total, U of Winnipeg	**58.5%**	**41.5%**	**60.3%**	**39.7%**	**59.0%**	**41.0%**	**64.9%**	**35.1%**	**62.3%**	**37.7%**	**64.0%**	**36.0%**

1. Includes undeclared majors

Brandon University Undergraduate Programs	1996/97 Proportions						2002/03 Proportions					
	Full-time		Part-time		Total		Full-time		Part-time		Total	
	Fem	Male	Fem	Male	Fem	Male	Fem	Male	Fem	Male	Fem	Male
Arts	60.0%	40.0%	56.0%	44.0%	58.8%	41.2%	62.3%	37.7%	66.0%	34.0%	63.5%	36.5%
Science	55.4%	44.6%	60.0%	40.0%	56.6%	43.4%	58.9%	41.1%	58.9%	41.1%	58.9%	41.1%
Education	71.9%	28.1%	74.8%	25.2%	72.9%	27.1%	79.6%	20.4%	73.9%	26.1%	77.0%	23.0%
Music	62.7%	37.3%	60.0%	40.0%	62.6%	37.4%	69.0%	31.0%	71.4%	28.6%	69.3%	30.7%
General Studies	50.4%	49.6%	58.8%	41.2%	53.9%	46.1%	58.4%	41.6%	66.7%	33.3%	62.0%	38.0%
Health Studies							84.5%	15.5%	92.0%	8.0%	87.8%	12.2%
FN Aboriginal Counseling							67.6%	32.4%	75.0%	25.0%	70.0%	30.0%
Non-faculty [1]			66.7%	33.3%	66.7%	33.3%			0.0%	100.0%	0.0%	100.0%
Total, Brandon U	**61.6%**	**38.4%**	**63.6%**	**36.4%**	**62.2%**	**37.8%**	**65.9%**	**34.1%**	**69.7%**	**30.3%**	**67.3%**	**32.7%**

1. Non faculty students have not registered in a faculty as of November 1st in that year.

CSB Undergraduate Programs	1996/97 Proportions						2002/03 Proportions					
	Full-time		Part-time		Total		Full-time		Part-time		Total	
	Fem	Male	Fem	Male	Fem	Male	Fem	Male	Fem	Male	Fem	Male
Arts	68.0%	32.0%	66.0%	34.0%	67.2%	32.8%	82.3%	17.7%	76.1%	23.9%	79.1%	20.9%
Business Admin							57.1%	42.9%	50.0%	50.0%	55.6%	44.4%
Science	61.0%	39.0%	69.2%	30.8%	63.0%	37.0%	65.8%	34.2%	66.7%	33.3%	66.1%	33.9%
Éducation	80.4%	19.6%	71.4%	28.6%	77.9%	22.1%	76.1%	23.9%	63.0%	37.0%	71.6%	28.4%
Université 1[1]							70.3%	29.7%	52.3%	47.7%	66.7%	33.3%
Con Ed[2]	54.5%	45.5%	71.4%	28.6%	61.1%	38.9%	60.0%	40.0%	66.7%	33.3%	65.6%	34.4%
UM Students[3]	100.0%	0.0%	70.0%	30.0%	71.4%	28.6%	40.0%	60.0%	59.5%	40.5%	57.1%	42.9%
Total, CSB	**69.8%**	**30.2%**	**68.2%**	**31.8%**	**69.2%**	**30.8%**	**73.4%**	**26.6%**	**67.1%**	**32.9%**	**70.8%**	**29.2%**

1. University I program was introduced in 1998. Most "new" students, with limited or no university experience registered in this program. Faculties/schools that had previously accepted "new" students will show an enrollment drop for 1998.
2. These students are taking courses at the university level but are not seeking a credential.
3. These are UM students taking courses at CSB.

Appendix 6: Graduate Enrollment Percentage Change by Faculty

University of Manitoba: Enrollment Change 1996/97 - 2002/03

Graduate Enrollment	Full-time		Part-time	
	Fem	Male	Fem	Male
Agricultural & Food Sciences	6.5%	-15.6%	-33.3%	0.0%
Architecture	40.4%	-5.3%	-83.3%	-42.9%
Arts	-11.5%	-32.7%	11.6%	-25.0%
Dentistry	-25.0%	0.0%	0.0%	0.0%
Education	-28.8%	9.1%	3.1%	-9.1%
Engineering	27.7%	6.5%	55.6%	-2.3%
Grad Studies	-26.3%	-16.7%	38.5%	175.0%
Human Ecology	-50.0%	-66.7%	12.5%	-100.0%
Law	0.0%	150.0%	0.0%	0.0%
Management	-5.3%	10.7%	22.9%	22.0%
Medicine	12.5%	-21.4%	-2.0%	-5.6%
Medical Rehabilitation	400.0%	100.0%	-50.0%	100.0%
Music[1]	50.0%	700.0%	0.0%	100.0%
Nat'l Resource Institute	3.0%	35.3%	-50.0%	-37.5%
Nursing	13.3%	-100.0%	26.7%	33.3%
Pharmacy	166.7%	0.0%	200.0%	100.0%
Phys Ed & Rec Studies	-13.3%	44.4%	400.0%	200.0%
Science	2.2%	-2.5%	20.0%	-15.0%
Social Work	8.5%	214.3%	-23.7%	-39.3%
Total, U of Manitoba	**0.2%**	**-8.1%**	**4.0%**	**-4.0%**

1. Music graduate program first enrolled students in 2001/02. Data shown are for the change between 2001/02 and 2002/03.

Brandon University: Enrollment Change 1996/97 - 2002/03

Graduate Enrollment	Full-time		Part-time	
	Fem	Male	Fem	Male
Education	-100.0%	-100.0%	65.6%	-36.0%
Music	0.0%	0.0%	100.0%	-33.3%
Rural Development[1]	0.0%	0.0%	0.0%	0.0%
Total, Brandon U	**-100.0%**	**-100.0%**	**87.9%**	**-17.9%**

1. The Master of Rural Development was introduced in 1999/00. Data shown are for 1999/00 to 2002/03

CSB: Enrollment Change 1996/97 - 2002/03

Graduate Enrollment	Full-time		Part-time	
	Fem	Male	Fem	Male
Education	-100.0%	0.0%	213.3%	9.5%
Canadian Studies[1]	0.0%	0.0%	60.0%	66.7%
Total, CSB	**-100.0%**	**0.0%**	**266.7%**	**33.3%**

1. The Master in Canadian Studies was introduced in 2001/02. Data shown are for the change between 2001/02 and 2002/03.

Appendix 7: Proportion of Women to Men by Institution and Faculty in Graduate Programs

U of Manitoba Graduate Programs	1996/97 Proportion						2002/03 Proportion					
	Full-time		Part-time		Total		Full-time		Part-time		Total	
	Fem	Male	Fem	Male	Fem	Male	Fem	Male	Fem	Male	Fem	Male
Agricultural & Food Sciences	40.8%	59.2%	42.9%	57.1%	41.0%	59.0%	46.5%	53.5%	33.3%	66.7%	45.0%	55.0%
Architecture	41.4%	58.6%	46.2%	53.8%	41.7%	58.3%	51.2%	48.8%	20.0%	80.0%	50.6%	49.4%
Arts	50.0%	50.0%	51.8%	48.2%	50.2%	49.8%	56.8%	43.2%	61.5%	38.5%	57.5%	42.5%
Dentistry	33.3%	66.7%	n/a	n/a	33.3%	66.7%	27.3%	72.7%	100.0%	0.0%	30.4%	69.6%
Education[2]	82.5%	17.5%	67.6%	32.4%	70.8%	29.2%	75.5%	24.5%	70.3%	29.7%	71.2%	28.8%
Engineering	18.0%	82.0%	17.0%	83.0%	17.8%	82.2%	20.8%	79.2%	24.6%	75.4%	21.4%	78.6%
Grad Studies	61.3%	38.7%	76.5%	23.5%	64.6%	35.4%	58.3%	41.7%	62.1%	37.9%	59.7%	40.3%
Human Ecology[2]	90.0%	10.0%	88.9%	11.1%	89.9%	10.1%	93.1%	6.9%	100.0%	0.0%	94.7%	5.3%
Law	60.0%	40.0%	n/a	n/a	60.0%	40.0%	37.5%	62.5%	n/a	n/a	37.5%	62.5%
Management	40.4%	59.6%	37.2%	62.8%	38.3%	61.7%	36.7%	63.3%	37.4%	62.6%	37.2%	62.8%
Medicine	52.1%	47.9%	73.5%	26.5%	57.2%	42.8%	60.9%	39.1%	74.2%	25.8%	64.1%	35.9%
Medical Rehabilitation	50.0%	50.0%	100.0%	0.0%	75.0%	25.0%	71.4%	28.6%	50.0%	50.0%	66.7%	33.3%
Music[1]	n/a	n/a	n/a	n/a	n/a	n/a	27.3%	72.7%	0.0%	100.0%	23.1%	76.9%
Nat'l Resource Institute	66.0%	34.0%	20.0%	80.0%	58.3%	41.7%	59.6%	40.4%	16.7%	83.3%	55.6%	44.4%
Nursing	93.8%	6.3%	95.2%	4.8%	94.9%	5.1%	100.0%	0.0%	95.0%	5.0%	95.9%	4.1%
Pharmacy	33.3%	66.7%	n/a	n/a	33.3%	66.7%	57.1%	42.9%	66.7%	33.3%	58.8%	41.2%
Phys Ed & Rec Studies	62.5%	37.5%	50.0%	50.0%	61.5%	38.5%	50.0%	50.0%	62.5%	37.5%	52.9%	47.1%
Science	36.2%	63.8%	33.3%	66.7%	35.9%	64.1%	37.3%	62.7%	41.4%	58.6%	37.7%	62.3%
Social Work	87.0%	13.0%	77.6%	22.4%	80.4%	19.6%	69.9%	30.1%	81.3%	18.7%	76.2%	23.8%
Total, U of Manitoba	**46.7%**	**53.3%**	**61.1%**	**38.9%**	**50.8%**	**49.2%**	**48.9%**	**51.1%**	**63.0%**	**37.0%**	**53.1%**	**46.9%**

1. Music graduate program first enrolled students in 2001/02. Data shown are for the change between 2001/02 and 2002/03.

Brandon University Graduate Programs	1996/97 Proportion						2002/03 Proportion					
	Full-time		Part-time		Total		Full-time		Part-time		Total	
	Fem	Male	Fem	Male	Fem	Male	Fem	Male	Fem	Male	Fem	Male
Education	83.3%	16.7%	56.1%	43.9%	58.7%	41.3%	0.0%	0.0%	76.8%	23.2%	76.8%	23.2%
Music	0.0%	0.0%	25.0%	75.0%	25.0%	75.0%	0.0%	0.0%	50.0%	50.0%	50.0%	50.0%
Rural Dev't	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	58.3%	41.7%	58.3%	41.7%
Total, Brandon U	**83.3%**	**16.7%**	**54.1%**	**45.9%**	**56.7%**	**43.3%**	**0.0%**	**0.0%**	**72.9%**	**27.1%**	**72.9%**	**27.1%**

CSB Graduate Programs	1996/97 Proportion						2002/03 Proportion					
	Full-time		Part-time		Total		Full-time		Part-time		Total	
	Fem	Male	Fem	Male	Fem	Male	Fem	Male	Fem	Male	Fem	Male
Education	100.0%	0.0%	41.7%	58.3%	43.2%	56.8%	0.0%	0.0%	67.1%	32.9%	67.1%	32.9%
Cdn Studies	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	61.5%	38.5%	61.5%	38.5%
Total, CSB	**100.0%**	**0.0%**	**41.7%**	**58.3%**	**43.2%**	**56.8%**	**0.0%**	**0.0%**	**66.3%**	**33.7%**	**66.3%**	**33.7%**